



FIELD CHANGE ORDER

Service

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Date : June 1998
Product Group : 742



OPTIMUS 50 / 65 / 80

APPLIES TO :

All OPTIMUS 50 / 65 / 80 generators
9890 000 02001
9890 000 0211x
9890 000 0212x
9890 000 0213x
9890 000 0214x
9890 000 0215x
all Optimus generators up to and including
serial numbers **970217**

TITLE :

Upgrade of Release 2.2 Optimus generators to
Release 2.3

LIST OF PAGES AND DRAWINGS :

1 ... 3 (98.0)

PREREQUISITE :

If the generator has not been delivered with Release 2.2 (4512 114 20822, see STAMMKARTE) one of the following upgrades must have been carried out:

4512 104 38561 Rel. 0.2/0.3/1.1 >> Rel. 2.2
(including TDC)

4512 104 38611 Rel. 0.2/0.3/1.1 >> Rel. 2.2
(USA and AUS only)

4512 104 38401 Rel. 0.2/0.3/1.1 >> Rel. 2.2
FCO 00 135 002

4512 104 38801 Rel. 2.1 >> Rel 2.2
FCO 00 135 003

INTRODUCTION

Symptoms :

- Setting the kV steps while additionally operating a button causes the kV values to rise to the maximum value or drop to the minimum value even if the buttons are released (the same applies to mA and mAs)
- Delayed exposure end signal

- Pressing the reset button and another button simultaneously after faulty exposure has the effect that the desk becomes inoperable.
- Sporadic display of 0..0 or 1..1 on the APR display or the main desk display.
- error combinations
00CD - 08CF
00CX - 08CY
00CF - 08CY
- erros
00CD, 00CY, 00CQ, 08CY
- "sleeping" error, which made the generator inoperable
00E0
- errors during the switch - on phase
00XI - 00M3

Cause :

Interferences and software instabilities can lead to different problems.

Remedy :

Release upgrade to release 2.3 including additional interference suppression activities.

MANPOWER / TIME TO COMPLETE

1 engineer 4 hours

TOOLS & TEST EQUIPMENT

- 3 + 4 mm Allan keys
- 10 mm open-end wrench
- low watt soldering iron with **fine tip**
- service PC with hardkey and mouse
- flash light
- PLCC extraction tool AMP 822154-1
2422 487 89772
- standard tools

MODIFICATION KIT / PARTS REQUIRED

For all systems mentioned in APPLIES TO, the following part can be ordered at the Service spare part centre in Hamburg:

4512 104 39882 Upgrade kit OPTIMUS rel. 2.3

comprising:

4512 114 20823	set of Proms Rel. 2.3
4512 113 18027	EZ 139 D4
4512 113 18037	EZ 139 D5
4512 113 20121	Prom kV control EZ 130 D 800
4512 113 20523	Prom Human Interface C300 D2
4512 113 22312	Prom Roco HS EY 100 D2
4512 104 90531	CAN adapter EZX 45
4512 104 39901	CAN termination plug
4512 104 39381	Roco interference suppression kit
2022 333 00024	33nF capcitor (mA control)
2012 573 00015	1nF capacitor (control desk)
2222 682 10339	2x 33pF capacitor (kV / mA control)
4512 984 08411	modification instruction

Note:

The modification kit will be available Free Of Charge till the end December 1998 at the spare part centre in Hamburg.

PROCEDURE

Detailed instruction manual supplied with the upgrade kit.

PARTS DISPOSAL

All parts are to be disposed of in a safe way in accordance with Local Safety Regulations.

DOCUMENTATION

File this FCO and the Upgrade instruction manual in binder: OPTIMUS under Tab 8

FIELD CHANGE ORDER ACTION NOTIFICATION REPORT

TITLE: Upgrade of Release 2.2 Optimus generators to Release 2.3	
CLASSIFICATION: Action for performance	FCO REF NO.: 00 135 005
APPLIES TO: All OPTIMUS release 2.2 generators	

HOSPITAL / ADDRESS:	
LOCATION / FW SITE No.	SALES ORDER NUMBER / OA NUMBER:
PRODUCT NUMBER:	<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> </div>
UNIT SERIAL NUMBER:	<div style="border: 1px solid black; width: 150px; height: 20px;"></div>
<p>ACTION ON THIS UNIT WAS: (select one)</p> <p>Completed per instructions on _____ DATE _____</p> <p>Done by the factory prior to delivery.</p> <p>Not completed because this unit is not affected per instructions.</p> <p>Not completed because customer has unit in storage</p>	JOB NUMBER / INCIDENT NUMBER <div style="border: 1px solid black; width: 150px; height: 20px;"></div>
<p>CUSTOMER ACKNOWLEDGEMENT (Required for MANDATORY ACTIONS only).</p> <p>The REASON and PURPOSE of this modification have been explained to me.</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____ SIGNATURE</div> <div>_____ DATE</div> <div>_____ TITLE</div> </div>	

Branch Region/ Dealer. _____	Service unit / Service area number: _____
<div style="border: 1px solid black; width: 100%; height: 100px; margin-top: 20px;"></div> <div style="text-align: center; margin-top: 10px;"> _____ SERVICE ENGINEER'S SIGNATURE </div> <div style="text-align: center; margin-top: 10px;"> _____ SERVICE MANAGER'S SIGNATURE </div>	Date: _____ MAIL TO: SSD Prep. Mgr.

number of required kits for FCO 00 135 005

4512 104 39882

Country	Number of Kits	Number of deliveries
Angola	2	
Australia	43	
Austria	43	
Belgium	6	
Bosnia	6	
Brazil	21	
Canada	18	
Chile	19	
China	4	
Colombia	1	
Czechoslovakia	2	
Denmark	10	
Egypt	1	
Estland	2	
Finland	7	
France	55	
Germany	462	
Ghana	14	
Greece	3	
Guadeloupe (France)	1	
GUS	6	
Hong Kong	21	
Hungary	1	
India	1	
Indonesia	1	
Ireland	4	
Israel	37	
Italy	20	
Japan	2	
Jordan	5	
Kenia	4	
Kuwait	1	
Libanon	1	
Libya	3	
Litauen (Germany)	1	
Livland (Germany)	1	
Malaysia	10	
Malta	1	
Morocco	4	
Namibia	1	
Netherlands	98	
New Zealand	17	
Norway	9	
Poland	4	
Portugal	16	
Russia (Germany)	4	
Saudi Arabia	27	
Singapore	14	
South Africa	12	
South Korea	12	
Spain	56	
Sweden	33	
Switzerland	52	
Tansania	1	
Thailand	8	
Turkey	2	
United Arab Emirates	14	
United Kingdom	128	

Country	Number of Kits	Number of deliveries
USA	229	
West India (Netherland)	2	
Yugoslavia	1	